

REMARKS

By this Amendment, claims 1, 6, 8, 15, 17, 20 and 21 have been amended. Applicant has amended the currently pending claims in order to expedite prosecution and do not, by this amendment, intend to abandon subject matter of the claims as originally filed or later presented. Moreover, Applicant reserves the right to pursue such subject matter in a continuing application. No new matter has been added. Claims 1-13 and 15-24 are pending in this patent application. Reconsideration of the rejections in view of the remarks below is requested.

The Office Action rejected claims 1, 3, 5-11, 13 and 17-24 under 35 U.S.C. §103(a) as being obvious in view of U.S. Patent No. 5,963,753 to Ohtani et al. ("Ohtani et al.") further in view of U.S. Patent No. 6,737,207 to Imai ("Imai"). Applicant respectfully traverses the rejection, without prejudice.

Applicant respectfully submits that the cited portions of Ohtani et al., Imai and the combination thereof fail to disclose, teach or suggest a lithocell comprising, *inter alia*, a transport system, outside of the lithographic apparatus and the track, configured to transport the substrate along an elongate transporter pathway between the track and the lithographic apparatus, wherein the track and the lithographic apparatus are side by side along at least part of their respective long sides and the transport system extends along at least part of a short side of the lithographic apparatus and the track as recited in independent claim 1 and a transport system, external to the track and lithographic apparatus, configured to transport the substrate between the track and the lithographic apparatus, the transport system comprising a robot arm pivotable about an axis at its first end and adapted to hold a substrate at its opposite end, wherein the track and the lithographic apparatus are side by side along at least part of their respective long sides and the transport system extends along at least part of a short side of the lithographic apparatus and the track as recited in independent claim 15. Further, Applicant respectfully submits that the cited portions of Ohtani et al., Imai and the combination thereof fail to disclose, teach or suggest a device manufacturing method using a lithocell comprising, *inter alia*, transporting the substrate to the lithographic apparatus from the track using a transporter between and external to them, wherein the track and the lithographic apparatus are side by side along at least part of their respective long sides and the transporter extends along at least part of a short side of the lithographic apparatus and the track as recited in independent claim 21.

Ohtani et al. merely discloses, referring to Figure 4 of Ohtani et al., a substrate processing apparatus 1 comprising a plurality of spin coating units (spin coaters) 10a for coating a photoresist solution to each substrate W, a plurality of spin developing units (spin developers) 10b for developing each substrate W, and first and second substrate transfer units 20 and 30 for transferring each substrate W. The second substrate transfer unit 30 has a second transfer path 31 extending in a direction perpendicular to the first transfer path 21, i.e., in the Y-axis direction (along arrow Y) on one end portion of the first transfer path 21. Exposure apparatuses 2a and 2b are arranged at opposite end portions of the second transfer path 31 of the substrate processing apparatus 1 respectively. Ohtani et al., col. 4, lines 46-51, col. 5, lines 1-4 and col. 5, lines 15-18.

However, Applicant respectfully submits that neither of the first and second substrate transfer units of Ohtani et al. are outside of or external to the lithographic apparatus and the track. Rather, Applicant submits the first and second substrate transfer units of Ohtani et al. are part of the track or substrate processing apparatus 1 of Ohtani et al.

Even if *arguendo* the first and/or second substrate transfer unit of Ohtani et al. is outside of or external to the lithographic apparatus and the track (which Applicant does not agree with as discussed above), Ohtani et al. fail to at least disclose a substrate processing apparatus being side by side with the exposure apparatus along at least part of their respective long sides and a substrate transfer unit extending along at least part of the short side of the exposure apparatus and the substrate processing apparatus. For example, in Figure 4 of Ohtani et al., even if *arguendo* the substrate processing apparatus and the exposure apparatus are side by side along at least part of their respective long sides (which Applicant submits Ohtani et al. do not clearly identify), there is no substrate transfer unit extending along at least part of the short side of the substrate processing apparatus and the exposure apparatus.

As noted in Applicant's specification, the typical configuration of the track and lithographic apparatus is that they are in "an in-line configuration, where one end of the track is aligned with one end of the lithographic apparatus; or an orthogonal configuration, where the track is placed perpendicularly to the lithographic apparatus, depending on the reach of the robot arm and the position of the load port of the lithographic apparatus. Because the configurations of the lithocell are limited, lithographic apparatus sizes are limited, as is the packing density of such lithocells in a fab." Applicant's specification, paragraph 5. Thus, an advantage of the claimed invention is that it is "possible to have a more efficient packing of

[the track and the lithographic apparatus] and a greater density to be packed into a smaller space.” Applicant’s specification, paragraph 15.

Further, the cited portions of Imai et al. fail to overcome the shortcomings of Ohtani et al. and/or to independently disclose, teach or suggest claims 1, 3, 5, 7-11, 13, 15, 18 and 20-24.

Imai was merely cited to disclose the details of a lithographic apparatus. However, Imai fails to disclose, teach or suggest, for example, a track being side by side with a lithographic apparatus along at least part of their respective long sides and the transport system extending along at least part of a short side of the lithographic apparatus and the track. For example, Figure 1 depicts a typical lithographic apparatus – track configuration as pictured in Figure 2(b) of Applicant’s specification.

Therefore, for at least the above reasons, the cited portions of Ohtani et al. and/or Imai fail to disclose, teach or suggest all the features recited by independent claims 1, 15 and 21. Claims 3, 5-11, 13 and 24 depend from independent claim 1, claims 17-20 depend from independent claim 15, and claims 22 and 23 depend from independent claim 21 and are, therefore, patentable for at least the same reasons provided above related to respectively claims 1, 15 and 21, and for the additional features recited in those dependent claims. As a result, Applicant respectfully submits that the rejection under 35 U.S.C. §103(a) of claims 1, 3, 5-11, 13 and 17-24 in view of Ohtani et al. and/or Imai should be withdrawn and the claims allowed.

The Office Action rejected claims 2 and 16 under 35 U.S.C. §103(a) as being obvious in view of Ohtani et al., further in view of Imai and further in view of U.S. Patent No. 5,399,531 to Wu (“Wu”). Applicant respectfully traverses the rejection, without prejudice.

As noted above, Ohtani et al. and Imai fail to disclose, teach or suggest independent claims 1 and 15. Claim 2 depends from claim 1 and is, therefore, patentable for at least the same reasons provided above regarding Ohtani et al. and Imai as related to independent claim 1, and for the additional features recited in that dependent claim. Claim 16 depends from claim 15 and is, therefore, patentable for at least the same reasons provided above regarding Ohtani et al. and Imai as related to independent claim 15, and for the additional features recited in that dependent claim.

Further, the cited portions of Wu fail to overcome the shortcomings of Ohtani et al. and Imai and/or to independently disclose, teach or suggest claims 2 and 16.

Wu was merely cited to disclose a mini-environment. While the cited portions of Wu describe wafer transfer from a lithography area to other equipment such as etching and deposition tools, Wu fail to disclose, teach or suggest, for example, a track being side to side with a lithographic apparatus along at least part of their respective long sides and the transport system extending along at least part of a short side of the lithographic apparatus and the track.

Therefore, for at least the above reasons, the cited portions of Ohtani et al., Imai and/or Wu fail to disclose, teach or suggest all the features recited by claims 2 and 16. As a result, Applicant respectfully submits that the rejection under 35 U.S.C. §103(a) of claims 2 and 16 in view of Ohtani et al., Imai and/or Wu should be withdrawn and the claims allowed.

The Office Action rejected claim 12 under 35 U.S.C. §103(a) as being obvious in view of Ohtani et al., further in view of Imai and further in view of U.S. Patent No. 6,604,624 to Hirata et al. ("Hirata et al."). Applicant respectfully traverses the rejection, without prejudice.

As noted above, Ohtani et al. and Imai fail to disclose, teach or suggest independent claim 1. Claim 12 depends from claim 1 and is, therefore, patentable for at least the same reasons provided above regarding Ohtani et al. and Imai as related to independent claim 1, and for the additional features recited in that dependent claim.

Further, the cited portions of Hirata et al. fail to overcome the shortcomings of Ohtani et al. and Imai and/or to independently disclose, teach or suggest claim 12. Hirata et al. describe a particular implementation of a wafer transport system to move wafers around a fab as is conventional in the art. This wafer transport system may move, for example, wafers between lithocells (combinations of lithographic apparatus and track). An example of such a wafer transport system is shown as automated material handling system (AMHS) 60 in Figure 4 of the Applicant's application and described in paragraph 70 on page 11 of the Applicant's specification. However, Hirata et al. fail to disclose, teach or suggest a transport system, outside of the lithographic apparatus and the track, configured to transport the substrate along an elongate transporter pathway between the track and the lithographic apparatus, wherein the track and the lithographic apparatus are side by side along at least part of their respective long sides and the transport system extends along at part of a short side of the lithographic apparatus and the track.

Therefore, for at least the above reasons, the cited portions of Ohtani et al., Imai and/or Hirata et al. fail to disclose, teach or suggest all the features recited by claim 12. As a

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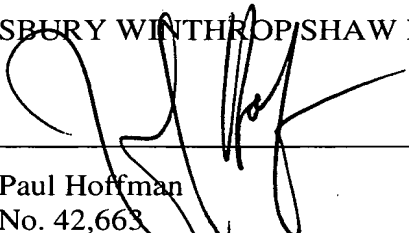
result, Applicant respectfully submits that the rejection under 35 U.S.C. §103(a) of claim 12 in view of Ohtani et al., Imai and/or Hirata et al. should be withdrawn and the claims allowed.

All objections and rejections having been addressed, it is respectfully submitted that the present application is in condition for allowance. If questions relating to patentability remain, the Examiner is invited to contact the undersigned to discuss them.

Should any fees be due, please charge them to our deposit account no. 03-3975, under our order no. 081468/0308381. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced deposit account.

Respectfully submitted,

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